



Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200  
Fax 613 632-5246

**U/R**

*Mace*  
*MATCH 5/20*

**D5805-9**

**Job Sheet 207535**



POSITIVE  
RECALL

Part No: D5805-9

Part Name: Stud



Part Weight: 0 lbs

Job Created: 2/27/20

Due Date: 3/27/20

Type: Stock

Job Qty: 12 pcs

*24 pcs.*

Status: New

Job Tracking No:

Created By: Jennifer Renwick

Description:

Note: URF 20-522 DWG D5805 REV.A IPP REV:A NEW ISSUE 20.01.15 JV VERF:DD

Ship Via:

**POSITIVE RECALL**

EFFECTIVE \_\_\_\_\_ AUTH \_\_\_\_\_

RELEASED \_\_\_\_\_ DATE \_\_\_\_\_

Priority: Medium

*N/A*

*LIMITED RELEASE*

### Bill of Materials

### Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Hardinge - 1	12 pcs	3/27/20	3/27/20	0.50	0.80	Hardinge - 1		<i>JB 20-03-07</i>
110	QC 2	12 pcs	3/27/20	3/27/20	0.00	0.00	QC 2 - 1		
							QC 2 - 12		
							QC 2 - 14		
							QC 2 - 17		
							QC 2 - 19		
							QC 2 - 2		
							QC 2 - 20		
							QC 2 - 22		
							QC 2 - 23		
							QC 2 - 25		
							QC 2 - 32		
							QC 2 - 33		
							QC 2 - 35		
							QC 2 - 39		
							QC 2 - 4		
							QC 2 - 40		
							QC 2 - 44		
							QC 2 - 45		
							QC 2 - 48		
							QC 2 - 49		
							QC 2 - 50		
							QC 2 - 51		
							QC 2 - 52		
							QC 2 - 57		
							QC 2 - 62		<i>JB 20-03-07</i>
							QC 2 - 63		
							QC 2 - 8		
							QC 2 - 66		
							QC 2 - 64		
							QC 2 - 65		



Container No: S261612



Part: D5805-9

Job No: 207535

Serial No/Batch: S261612

Revision: REV.A

Inspector:

Exp Date:

Instructions:

1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
CANADA  
TEL.: 1 613 632-5200  
Email: sales@dartaero.com  
www.dartaerospace.com

Date: 03/07/20

DAS  
62  
9-89

DAS  
62  
9-89

Plex 3/5/20 7:17 AM Dart.lajeunesse.marie

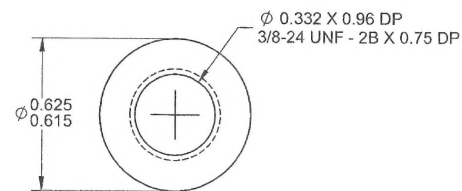
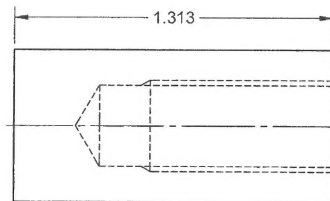


120	QC 8	12 pcs	3/27/20	0.00 0.00	QC 2 - 5	
					QC 2 - 71	
					QC 2 - 73	
					QC 2 - 69	
					QC 2 - 76	
					QC 8 - 12	
					QC 8 - 14	
					QC 8 - 17	
					QC 8 - 20	
					QC 8 - 25	
					QC 8 - 3	
					QC 8 - 32	
					QC 8 - 33	
					QC 8 - 35	
					QC 8 - 39	
					QC 8 - 4	
					QC 8 - 44	
					QC 8 - 45	
					QC 8 - 49	
					QC 8 - 58	
					QC 8 - 8	
					QC 8 - 9	
					QC 8 - 68	
					QC 8 - 67	
					QC 8 - 1 (A)	
					QC 8 - 47	
					QC 8 - 40	
					QC 8 - 52	
					QC 8 - 23	
					QC 8 - 57	
					QC 8 - 76	
					QC 8 - 61	
130	Packaging 3-1 - Stock - B4B	12 pcs	3/27/20	0.00 0.00	Packaging 3 - 1 - B4B	
					Packaging 3 - 2 - B4B	
					Packaging 3 - 3 - B4B	
					Packaging 3 - 4 - B4B	
					Packaging 3 - 5 - B4B	
					Packaging 3 - 6 - B4B	
					Packaging 3 - 7 - B4B	
					Packaging 3 - 8 - B4B	
					Packaging 3 - 9 - B4B	
					Packaging 3 - 10 - B4B	
					Packaging 3 - 11 - B4B	
					Packaging 3 - 12 - B4B	
					Packaging 3 - 13 - B4B	
					Packaging 3 - 14 - B4B	
					Packaging 3 - 15 - B4B	
					Packaging 3 - 16 - B4B	
					Packaging 3 - 17 - B4B	
					Packaging 3 - 18 - B4B	
					Packaging 3 - 19 - B4B	
					Packaging 3 - 20 - B4B	
					Packaging 3 - 21 - B4B	
					Packaging 3 - 22 - B4B	
					Packaging 3 - 23 - B4B	
					Packaging 3 - 24 - B4B	
					Packaging 3 - 25 - B4B	
					Packaging 3 - 26 - B4B	
					Packaging 3 - 27 - B4B	

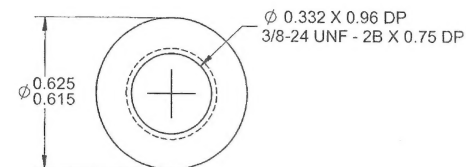
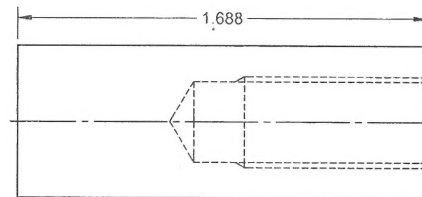


				Packaging 3 - 28 - B4B	
				Packaging 3 - 29 - B4B	
				Packaging 3 - 30 - B4B	
				Packaging 3 - 31 - B4B	
				Packaging 3 - 32 - B4B	
				Packaging 3 - 33 - B4B	
				Packaging 3 - 34 - B4B	
				Packaging 3 - 35 - B4B	
				Packaging 3 - 36 - B4B	
				Packaging 3 - 37 - B4B	
140 QC 21 - SA	12 pcs	3/27/20	0.00 0.00	QC 21 - SA - 21	21
				QC 21 - SA - 70	21
				QC 21 - SA - 53	21
Part Op <b>100</b> - 1-Machine as per folio F _____ FOLIO REV: _____ DWG REV: <u>A</u> 2-Deburr Descriptions: <b>110</b> - QC2- Inspect parts off machine FAI/FAIB <b>120</b> - QC8- Inspect parts - second check <b>130</b> - Identify as per dwg & Stock Location: _____ <b>140</b> - QC21- Final Inspection - Work Order Release					
<b>Job BOM</b>					
<b>Part / Item</b>	<b>Component Name</b>	<b>Quantity</b>	<b>Operation</b>	<b>Container</b>	
M1018R0.625	M1018R0.625	1.8276 ft (.1523 ea)	100-Hardinge - 1	5000799	
<b>Job Allocations</b>					
<b>Operation</b>	<b>Component Part</b>	<b>Required</b>	<b>Inventory</b>	<b>Allocated</b>	
100-Hardinge - 1	M1018R0.625 0.750" B.A	2	0	0	
<b>Part Specifications</b>					
Specifications could not be found.					

Plex 3/5/20 7:17 AM Dart.lajeunesse.marie



**D5805-7 STUD**  
(DERIVED FROM AERO DESIGN P/N 76423-05)



**D5805-9 STUD**  
(DERIVED FROM AERO DESIGN P/N 76423-06)

UNDER REVIEW  
URF 2020-522 20.02.14 (NO)

**NOTES:**

- 1) MATERIAL: AISI 1018/1025 STEEL ROUND BAR  
PER MIL-S-7097 OR ASTM A108  
REF DART SPEC M1018-R
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: -7: 0.09 lbs  
-9: 0.12 lbs

**RELEASED**  
2020 FEB 18 NO

APPROVED

DESIGN	ZF	<b>DART AEROSPACE LTD</b>	
DRAWN	ZF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	KPT	DRAWING NO.	REV. A
MFG. APPR.	DD	<b>D5805</b>	SHEET 6 OF 6
APPROVED	NO	TITLE	SCALE
DE APPR.	CP	<b>ATTACHMENT HOOP</b>	NTS
DATE	20.01.13	<small>COPYRIGHT © 2020 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	



**DART AEROSPACE LTD**

### Work Order:

207535

**Description:** ATTACHMENT HOOP STUD

Part Number:

**D5805-9**

**Inspection Dwg: D5805**

Rev: A

Page 1 of 1

# INSPECTION SHEET

[illegible]

DAS  
62

DAS  
23

**Measured by:**

TB

9-89

**Checked by:**

9-89

**QC Inspector:**

Date:

20.03.07

Date:

201317

Date:

**Engineering Approval:**  
(If necessary)

Date:

Rev	Date	Change	Revised by	Approved
A	7-Mar-20	New Issue	MG	



Dart Hawkesbury  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200

## PURCHASE ORDER PO37858

**Supplier:** ACI001-VC  
Acier Ouellette Inc.  
935 Boul. Du Havre  
Valleyfield  
QC  
J6S 5L1 Canada  
Phone: 800 667 4248  
Fax: 450 377 5696

**PO No:** PO37858  
**PO Date:** 9/25/17  
**Due Date:** 10/6/17  
**Purchase Order**  
**Revision:**  
**Revision Date:**  
**Ship-To Contact:** Phone:

**Ship To:** 1270 Aberdeen Street  
Hawkesbury  
ON  
K6A 1K7 Canada  
Phone: 613-632-5200

**Pymt Terms:** net 30  
**Freight Terms:**  
**Special Comments:**

Items											
Line Item	Part	Rev	Description	Item Tax	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	M1018R2.250	-	M1018R2.250 : MATERIAL: AISI 1018-1025 ROUND BAR M1010S20GA AS PER MIL-S-7097 OR ASTM A108		Firmed	10/6/17	3 ft	0 ft 3x	3 ft	\$12.206666/ft	\$36.62
2	M1018R0.750	-	M1018R0.750 : MATERIAL: AISI 1018-1025 ROUND BAR M1010S20GA AS PER MIL-S-7097 OR ASTM A108		Firmed	10/6/17	20 ft	0 ft 2x B.11	20 ft	\$1.169/ft	\$23.38
3	M1018B1.000X06.000	-	1010-1025 Steel Bar 1.000 X 6.000 : MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A569/A570 OR OR CSA G40-21 38W/44W/50W/60W/70W CSA G40-21 OR 38W/44W/50W/60W/70W		Firmed	10/6/17	6 ft	0 ft 6x	6 ft	\$30.42/ft	\$182.52
4	M304R.500	-	304 SS roundbar .500 : MATERIAL: AISI 304/316 SS ROUND BAR AS PER ASTM A276 NOTE: AISI 303 NOT ACCEPTABLE		Firmed	10/6/17	36 ft	0 ft 36x	36 ft	\$1.9072222/ft	\$68.66
5	M6061T6R1.375	-	6061-T6 Round Bar 1.375" : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117 4128/4115/4116 OR QQ-AA-200/8 OR AMS-QQ-A-		Firmed	10/6/17	12 ft	0 ft 12x	12 ft	\$5.6841666/ft	\$68.21



Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID PO37858

Purchase Order Date 9/25/2017

PO Print Date 9/25/2017

Page Number 1 of 6

Order From :

VC-CAM002

Ship To : DART AEROSPACE LTD

ACIER OUELLETTE INC.  
935 BOUL. DU HAVRE  
VALLEYFIELD, QC J6S 5L1  
CA

1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
CANADA

E-MAILED  
SEP 25 2017

Contact Name

Vendor Phone 800 667 4248

Buyer

Chantal Lavoie

Customer POID

Customer Tax # 10127-2607

Terms

Net 30

Currency

CAD

FOB

FCA - (Free Carrier)

Ship To Contact

Ship To Phone

Ship Via: Yours ppd

Ship Acct:

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
----------	--	------------------------	--------------------------------------	----	--------------------------------	---------------	----------------

1	M1018R2.250	M1018R2.250	10/6/2017 Yes 10/6/2017		3.00 f	\$12.21	\$36.62
---	-------------	-------------	-------------------------------	--	-----------	---------	---------

MATERIAL: AISI 1018-1025 ROUND BAR AS PER  
MIL-S-7097 OR ASTM A108

Line Total: \$36.62

2	M1018R0.750	M1018R0.750	10/6/2017 Yes 10/6/2017		20.00 f	\$1.17	\$23.38
---	-------------	-------------	-------------------------------	--	------------	--------	---------

MATERIAL: AISI 1018-1025 ROUND BAR AS PER  
MIL-S-7097 OR ASTM A108

recd. 18.11  
10-17

Line Total: \$23.38

PO Instructions: QUOTATION: SOU0059954

Note:

9/25/2017



ARANA Y LUPARDO, 2  
48490 UGAO-MIRAVALLS/VIZCAYA (SPAIN)  
Tfno.: 946480211  
Fax: 946480128  
Email: calpradera@calibradospradera.es  
www.calibradospradera.es

TRA 1589 48490

3P.

## CERTIFICADO DE CALIDAD/QUALITY REPORT

De acuerdo a /Made according to:

EN 10204/DIN 50049

3.1

Nº CERTIFICADO / CERTIFICATE NR.: 47862

ALBARAN 47862 Delivery Note Nr.	CLIENTE LES ACIERS TRANSPEC (1997) LTÉE CUSTOMER
------------------------------------	---

Norma : EN 10277

Productos Calibrados de acero. Condiciones técnicas de suministro.

Norm :

Bright steel products. Technical delivery conditions.

PRODUCTO SOLICITADO / PRODUCT ACCORDING ASTM A108

Nº PEDIDO Purchase Order	DESCRIPCIÓN Description	KGS.	TOLERANCIA TOLERANCE	OF	MEDIDA Measurement
VI 46700	12L14 RED. ESTIRADO 25,40 (1")	1.004	- 0,051	202437	25,40
PAR-47782	1018 RED. ESTIRADO 25,00	1.822	- 0,051	139261	25,00
PAR-47785	1018 RED. ESTIRADO 25,00	3.982	- 0,051	139283	25,00
PAR-47786	12L14 RED. ESTIRADO 12,70 (1/2")	1.000	- 0,051	137659	12,70
PAR-47795	1018 CUA. ESTIRADO 31,75 (1 1/4")	1.224	- 0,160	136439	31,75
SM-47572	1018 RED. ESTIRADO 15,88 (5/8")	1.008	- 0,051	916391	15,88
SM-47572	1018 RED. ESTIRADO 19,05 (3/4")	1.134	- 0,051	139479	19,05
OU-47832	12L14 RED. ESTIRADO 12,70 (1/2")	1.000	- 0,051	137659	12,70
OU-47832	1018 RED. ESTIRADO 19,05 (3/4")	1.190	- 0,051	139625	19,05
PAJ-48073	1018 CUA. ESTIRADO 9,53 (3/8")	983	- 0,090	915990	9,53
PAJ-48073	1018 RED. ESTIRADO 15,88 (5/8")	1.150	- 0,051	916216	15,88
PAR-48154	1018 CUA. ESTIRADO 6,35 (1/4")	784	- 0,090	915673	6,35
PAR-48154	1018 RED. ESTIRADO 7,94 (5/16")	1.090	- 0,051	916609	7,94
PAR-48154	1018 RED. ESTIRADO 22,23 (7/8")	3.034	- 0,051	139773	22,23
PAR-48154	12L14 RED. ESTIRADO 15,88 (5/8")	824	- 0,051	916509	15,88
MJP-47896	12L14 RED. ESTIRADO 25,40 (1")	784	- 0,051	202437	25,40
PAR-48154	1018 RED. ESTIRADO 28,58 (1 1/8")	744	- 0,051	916104	28,58
MEN-47094	1018 RED. ESTIRADO 22,23 (7/8")	1.012	- 0,051	139824	22,23

Composición química de la colada / Chemical Analysis of Heat

MEDIDA Measurement	OF	COLADA Cast Nr.	% C	% Cr	% Cu	% Mn	% Mo	% N	% Ni	% P	% Pb	% S	% Si
25,40	0,00	202437	0,060	0,086	0,014	1,130	0,006	0,000	0,023	0,063	0,300	0,310	0,003
25,00	0,00	139261	0,150	0,000	0,000	0,630	0,000	0,000	0,000	0,007	0,000	0,014	0,125
25,00	0,00	139283	0,150	0,000	0,000	0,630	0,000	0,000	0,000	0,007	0,000	0,014	0,125
12,70	0,00	137659	0,067	0,025	0,016	1,057	0,004	0,000	0,018	0,053	0,192	0,283	0,018
31,75	0,00	136439	0,159	0,000	0,000	0,806	0,000	0,000	0,000	0,018	0,000	0,024	0,183
15,88	0,00	916391	0,145	0,000	0,000	0,775	0,000	0,000	0,000	0,013	0,000	0,027	0,157
19,05	0,00	139479	0,151	0,000	0,015	0,841	0,000	0,004	0,000	0,012	0,000	0,029	0,204
12,70	0,00	137659	0,067	0,025	0,016	1,057	0,004	0,000	0,018	0,053	0,192	0,283	0,018
19,05	0,00	139625	0,151	0,000	0,015	0,841	0,000	0,004	0,000	0,012	0,000	0,029	0,204
9,53	0,00	915990	0,140	0,000	0,198	0,760	0,000	0,000	0,000	0,016	0,000	0,033	0,242
15,88	0,00	916216	0,145	0,000	0,000	0,775	0,000	0,000	0,000	0,013	0,000	0,027	0,157
6,35	0,00	915673	0,150	0,000	0,000	0,770	0,000	0,000	0,000	0,007	0,000	0,026	0,225
7,94	0,00	916609	0,170	0,000	0,000	0,730	0,000	0,000	0,000	0,017	0,000	0,018	0,160
22,23	0,00	139773	0,173	0,000	0,132	0,817	0,000	0,003	0,000	0,010	0,000	0,022	0,218
15,88	0,00	916509	0,068	0,033	0,020	1,134	0,004	0,000	0,022	0,055	0,329	0,290	0,051
25,40	0,00	202437	0,060	0,086	0,014	1,130	0,006	0,000	0,023	0,063	0,300	0,310	0,003
28,58	0,00	916104	0,155	0,000	0,000	0,635	0,000	0,000	0,000	0,013	0,000	0,016	0,137
22,23	0,00	139824	0,173	0,000	0,132	0,817	0,000	0,003	0,000	0,010	0,000	0,022	0,218

Características mecánicas / Mechanical properties



# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M1018R0.750

PO / BATCH NO.: 037858/500799

DATE: OCT 18 2017

MATERIAL CERT REC'D: yes

THICKNESS ORDERED: .750

QUANTITY RECEIVED: 19'

THICKNESS RECEIVED: .750

QUANTITY INSPECTED: 19'

SHEET SIZE ORDERED: N/A

QUANTITY REJECTED: 0

SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
CORRECT FINISH	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
CORROSION	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="checkbox"/>	<input type="checkbox"/>	45m A108
CORRECT THICKNESS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
PHOTO REQUIRED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Ht #139625
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/>	<input type="checkbox"/>	5000799
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

*testers located in the Quality Office*

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>DAS</u>	SIGNED OFF BY: _____		
DATE: <u>OCT 18 2017</u>	DATE: _____		

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in